RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/729,895A
Source: IFW0
Date Processed by STIC: 8/3/05

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/729,895A

CRF Edit Date: 8/8/05

Edited by: [illegible]

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

/ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

_____

___ Moved responses to same line as heading/numeric identifier, specifically:

_____

___ Other:

_____

_____

_____

Revised 09/09/2003

IFWO

RAW SEQUENCE LISTING DATE: 08/08/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 10:52:14

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08082005\J729895A.raw**

```
 3 <110> APPLICANT: UNIVERSITY OF NEW MEXICO
 5 <120> TITLE OF INVENTION: OUTCOME PREDICTION AND RISK CLASSIFICATION IN CHILDHOOD
 6       LEUKEMIA
 8 <130> FILE REFERENCE: N12-038US/310.00050101
10 <140> CURRENT APPLICATION NUMBER: 10/729,895A
11 <141> CURRENT FILING DATE: 2003-12-05
13 <150> PRIOR APPLICATION NUMBER: 60/510,904
14 <151> PRIOR FILING DATE: 2003-10-14
16 <150> PRIOR APPLICATION NUMBER: 60/510,968
17 <151> PRIOR FILING DATE: 2003-10-14
19 <150> PRIOR APPLICATION NUMBER: 60/432,064
20 <151> PRIOR FILING DATE: 2002-12-06
22 <150> PRIOR APPLICATION NUMBER: 60/432,077
23 <151> PRIOR FILING DATE: 2002-12-06
25 <150> PRIOR APPLICATION NUMBER: 60/432,078
26 <151> PRIOR FILING DATE: 2002-12-06
28 <160> NUMBER OF SEQ ID NOS: 18
30 <170> SOFTWARE: PatentIn Ver. 3.2
32 <210> SEQ ID NO: 1
33 <211> LENGTH: 1080
34 <212> TYPE: DNA
35 <213> ORGANISM: Homo sapiens
37 <220> FEATURE:
38 <221> NAME/KEY: CDS
39 <222> LOCATION: (1)..(1026)
41 <400> SEQUENCE: 1
42 atg cct ttc ctt ttg ggt ctt aga cag gat aag gaa gcc tgt gtg ggt   48
43 Met Pro Phe Leu Leu Gly Leu Arg Gln Asp Lys Glu Ala Cys Val Gly
44   1               5                  10                  15
46 acc aac aat caa agc tac atc tgt gac aca gga cac tgc tgt gga cag   96
47 Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly His Cys Cys Gly Gln
48              20                  25                  30
50 tct cag tgc tgc aac tac tac tat gaa ctc tgg tgg ttc tgg ctg gtg   144
51 Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp Trp Phe Trp Leu Val
52          35                  40                  45
54 tgg acc atc atc atc atc ctg agc tgc tgc tgt gtt tgc cac cac cgc   192
55 Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys Cys Val Cys His His Arg
56      50                  55                  60
58 cga gcc aag cac cgc ctt cag gcc cag cag cgg caa cat gaa atc aac   240
59 Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg Gln His Glu Ile Asn
60  65                  70                  75                  80
62 ctg atc gct tac cga gaa gcc cac aat tac tca gcg ctg cca ttt tat   288
63 Leu Ile Ala Tyr Arg Glu Ala His Asn Tyr Ser Ala Leu Pro Phe Tyr
```

RAW SEQUENCE LISTING DATE: 08/08/2005
PATENT APPLICATION: US/10/729,895A TIME: 10:52:14

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\08082005\J729895A.raw

```
64                  85                  90                  95
66 ttc agg ttt ttg cca aac tat tta cta cct cct tat gag gaa gtg gtg   336
67 Phe Arg Phe Leu Pro Asn Tyr Leu Leu Pro Pro Tyr Glu Glu Val Val
68              100                 105                 110
70 aac cga cct cca act cct ccc cca cca tac agt gcc ttc cag cta cag   384
71 Asn Arg Pro Pro Thr Pro Pro Pro Pro Tyr Ser Ala Phe Gln Leu Gln
72          115                 120                 125
74 cag cag cag ctg ctg cct cca cag tgt ggc cct gca ggt ggc agt ccc   432
75 Gln Gln Gln Leu Leu Pro Pro Gln Cys Gly Pro Ala Gly Gly Ser Pro
76      130                 135                 140
78 ccg ggc atc gat ccc acc agg gga tcc cag ggg gca cag agc agc ccc   480
79 Pro Gly Ile Asp Pro Thr Arg Gly Ser Gln Gly Ala Gln Ser Ser Pro
80 145                 150                 155                 160
82 ttg tct gag ccc agc aga agc agc aca aga ccc cca agc atc gct gac   528
83 Leu Ser Glu Pro Ser Arg Ser Ser Thr Arg Pro Pro Ser Ile Ala Asp
84                  165                 170                 175
86 cct gat ccc tct gac cta cca gtt gac cga gca gcc acc aaa gcc cca   576
87 Pro Asp Pro Ser Asp Leu Pro Val Asp Arg Ala Ala Thr Lys Ala Pro
88              180                 185                 190
90 ggg atg gag ccc agt ggc tct gtg gct ggc ctg ggg gag ctg gac ccg   624
91 Gly Met Glu Pro Ser Gly Ser Val Ala Gly Leu Gly Glu Leu Asp Pro
92          195                 200                 205
94 ggg gcc ttc ctg gac aaa gat gca gaa tgt agg gag gag ctg ctg aaa   672
95 Gly Ala Phe Leu Asp Lys Asp Ala Glu Cys Arg Glu Glu Leu Leu Lys
96      210                 215                 220
98 gat gac agc tct gaa cac ggc gca ccc gac agc aaa gag aag acg cct   720
99 Asp Asp Ser Ser Glu His Gly Ala Pro Asp Ser Lys Glu Lys Thr Pro
100 225                 230                 235                 240
102 ggg aga cat cgc cgc ttc aca ggt gac tcg ggc att gaa gtg tgt gtg   768
103 Gly Arg His Arg Arg Phe Thr Gly Asp Ser Gly Ile Glu Val Cys Val
104                 245                 250                 255
106 tgc aac cgg ggc cac cat gac gat gac ctc aaa gag ttc aac aca ctc   816
107 Cys Asn Arg Gly His His Asp Asp Asp Leu Lys Glu Phe Asn Thr Leu
108             260                 265                 270
110 atc gat gat gct ctg gat ggg ccc ctg gac ttc tgc gac agc tgc cat   864
111 Ile Asp Asp Ala Leu Asp Gly Pro Leu Asp Phe Cys Asp Ser Cys His
112         275                 280                 285
114 gtg cgg ccc cct ggt gat gag gag gaa ggc ctc tgt cag tcc tct gag   912
115 Val Arg Pro Pro Gly Asp Glu Glu Glu Gly Leu Cys Gln Ser Ser Glu
116     290                 295                 300
118 gag cag gct cga gag cct ggg cac ccg cac ctg cca cgg ccg ccc gca   960
119 Glu Gln Ala Arg Glu Pro Gly His Pro His Leu Pro Arg Pro Pro Ala
120 305                 310                 315                 320
122 tgc ctg ctg ctg aac acc atc aac gag cag gac tct ccc aac tcc cag   1008
123 Cys Leu Leu Leu Asn Thr Ile Asn Glu Gln Asp Ser Pro Asn Ser Gln
124                 325                 330                 335
126 agc agc agc tcc ccc agc tagagcaggt cctgccagca cccagcaact          1056
127 Ser Ser Ser Ser Pro Ser
128             340
```

RAW SEQUENCE LISTING DATE: 08/08/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 10:52:14

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08082005\J729895A.raw**

130 tggcaaagca accagggtag ggga 1080
133 <210> SEQ ID NO: 2
134 <211> LENGTH: 342
135 <212> TYPE: PRT
136 <213> ORGANISM: Homo sapiens
138 <400> SEQUENCE: 2
139 Met Pro Phe Leu Leu Gly Leu Arg Gln Asp Lys Glu Ala Cys Val Gly
140 1 5 10 15
142 Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly His Cys Cys Gly Gln
143 20 25 30
145 Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp Trp Phe Trp Leu Val
146 35 40 45
148 Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys Cys Val Cys His His Arg
149 50 55 60
151 Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg Gln His Glu Ile Asn
152 65 70 75 80
154 Leu Ile Ala Tyr Arg Glu Ala His Asn Tyr Ser Ala Leu Pro Phe Tyr
155 85 90 95
157 Phe Arg Phe Leu Pro Asn Tyr Leu Leu Pro Pro Tyr Glu Glu Val Val
158 100 105 110
160 Asn Arg Pro Pro Thr Pro Pro Pro Pro Tyr Ser Ala Phe Gln Leu Gln
161 115 120 125
163 Gln Gln Gln Leu Leu Pro Pro Gln Cys Gly Pro Ala Gly Gly Ser Pro
164 130 135 140
166 Pro Gly Ile Asp Pro Thr Arg Gly Ser Gln Gly Ala Gln Ser Ser Pro
167 145 150 155 160
169 Leu Ser Glu Pro Ser Arg Ser Ser Thr Arg Pro Pro Ser Ile Ala Asp
170 165 170 175
172 Pro Asp Pro Ser Asp Leu Pro Val Asp Arg Ala Ala Thr Lys Ala Pro
173 180 185 190
175 Gly Met Glu Pro Ser Gly Ser Val Ala Gly Leu Gly Glu Leu Asp Pro
176 195 200 205
178 Gly Ala Phe Leu Asp Lys Asp Ala Glu Cys Arg Glu Glu Leu Leu Lys
179 210 215 220
181 Asp Asp Ser Ser Glu His Gly Ala Pro Asp Ser Lys Glu Lys Thr Pro
182 225 230 235 240
184 Gly Arg His Arg Arg Phe Thr Gly Asp Ser Gly Ile Glu Val Cys Val
185 245 250 255
187 Cys Asn Arg Gly His His Asp Asp Asp Leu Lys Glu Phe Asn Thr Leu
188 260 265 270
190 Ile Asp Asp Ala Leu Asp Gly Pro Leu Asp Phe Cys Asp Ser Cys His
191 275 280 285
193 Val Arg Pro Pro Gly Asp Glu Glu Glu Gly Leu Cys Gln Ser Ser Glu
194 290 295 300
196 Glu Gln Ala Arg Glu Pro Gly His Pro His Leu Pro Arg Pro Pro Ala
197 305 310 315 320
199 Cys Leu Leu Leu Asn Thr Ile Asn Glu Gln Asp Ser Pro Asn Ser Gln
200 325 330 335
202 Ser Ser Ser Ser Pro Ser

RAW SEQUENCE LISTING DATE: 08/08/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 10:52:14

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08082005\J729895A.raw**

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203             340
207 <210> SEQ ID NO: 3
208 <211> LENGTH: 1140
209 <212> TYPE: DNA
210 <213> ORGANISM: Homo sapiens
212 <220> FEATURE:
213 <221> NAME/KEY: CDS
214 <222> LOCATION: (1)..(1089)
216 <400> SEQUENCE: 3
217 atg gag agg aga agg ctc ctg ggt ggc atg gcg ctc ctg ctc ctc cag   48
218 Met Glu Arg Arg Arg Leu Leu Gly Gly Met Ala Leu Leu Leu Leu Gln
219   1               5                  10                  15
221 gcg ctg ccc agc ccc ttg tca gcc agg gct gaa ccc ccg cag gat aag   96
222 Ala Leu Pro Ser Pro Leu Ser Ala Arg Ala Glu Pro Pro Gln Asp Lys
223              20                  25                  30
225 gaa gcc tgt gtg ggt acc aac aat caa agc tac atc tgt gac aca gga   144
226 Glu Ala Cys Val Gly Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly
227          35                  40                  45
229 cac tgc tgt gga cag tct cag tgc tgc aac tac tac tat gaa ctc tgg   192
230 His Cys Cys Gly Gln Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp
231      50                  55                  60
233 tgg ttc tgg ctg gtg tgg acc atc atc atc atc ctg agc tgc tgc tgt   240
234 Trp Phe Trp Leu Val Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys Cys
235  65                  70                  75                  80
237 gtt tgc cac cac cgc cga gcc aag cac cgc ctt cag gcc cag cag cgg   288
238 Val Cys His His Arg Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg
239                  85                  90                  95
241 caa cat gaa atc aac ctg atc gct tac cga gaa gcc cac aat tac tca   336
242 Gln His Glu Ile Asn Leu Ile Ala Tyr Arg Glu Ala His Asn Tyr Ser
243             100                 105                 110
245 gcg ctg cca ttt tat ttc agg ttt ttg cca aac tat tta cta cct cct   384
246 Ala Leu Pro Phe Tyr Phe Arg Phe Leu Pro Asn Tyr Leu Leu Pro Pro
247         115                 120                 125
249 tat gag gaa gtg gtg aac cga cct cca act cct ccc cca cca tac agt   432
250 Tyr Glu Glu Val Val Asn Arg Pro Pro Thr Pro Pro Pro Pro Tyr Ser
251     130                 135                 140
253 gcc ttc cag cta cag cag cag cag ctg ctg cct cca cag tgt ggc cct   480
254 Ala Phe Gln Leu Gln Gln Gln Gln Leu Leu Pro Pro Gln Cys Gly Pro
255 145                 150                 155                 160
257 gca ggt ggc agt ccc ccg ggc atc gat ccc acc agg gga tcc cag ggg   528
258 Ala Gly Gly Ser Pro Pro Gly Ile Asp Pro Thr Arg Gly Ser Gln Gly
259                 165                 170                 175
261 gca cag agc agc ccc ttg tct gag ccc agc aga agc agc aca aga ccc   576
262 Ala Gln Ser Ser Pro Leu Ser Glu Pro Ser Arg Ser Ser Thr Arg Pro
263             180                 185                 190
265 cca agc atc gct gac cct gat ccc tct gac cta cca gtt gac cga gca   624
266 Pro Ser Ile Ala Asp Pro Asp Pro Ser Asp Leu Pro Val Asp Arg Ala
267         195                 200                 205
269 gcc acc aaa gcc cca ggg atg gag ccc agt ggc tct gtg gct ggc ctg   672
```

RAW SEQUENCE LISTING DATE: 08/08/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 10:52:14

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08082005\J729895A.raw**

```
270 Ala Thr Lys Ala Pro Gly Met Glu Pro Ser Gly Ser Val Ala Gly Leu
271     210                 215                 220
273 ggg gag ctg gac ccg ggg gcc ttc ctg gac aaa gat gca gaa tgt agg   720
274 Gly Glu Leu Asp Pro Gly Ala Phe Leu Asp Lys Asp Ala Glu Cys Arg
275 225                 230                 235                 240
277 gag gag ctg ctg aaa gat gac agc tct gaa cac ggc gca ccc gac agc   768
278 Glu Glu Leu Leu Lys Asp Asp Ser Ser Glu His Gly Ala Pro Asp Ser
279                 245                 250                 255
281 aaa gag aag acg cct ggg aga cat cgc cgc ttc aca ggt gac tcg ggc   816
282 Lys Glu Lys Thr Pro Gly Arg His Arg Arg Phe Thr Gly Asp Ser Gly
283             260                 265                 270
285 att gaa gtg tgt gtg tgc aac cgg ggc cac cat gac gat gac ctc aaa   864
286 Ile Glu Val Cys Val Cys Asn Arg Gly His His Asp Asp Asp Leu Lys
287         275                 280                 285
289 gag ttc aac aca ctc atc gat gat gct ctg gat ggg ccc ctg gac ttc   912
290 Glu Phe Asn Thr Leu Ile Asp Asp Ala Leu Asp Gly Pro Leu Asp Phe
291     290                 295                 300
293 tgc gac agc tgc cat gtg cgg ccc cct ggt gat gag gag gaa ggc ctc   960
294 Cys Asp Ser Cys His Val Arg Pro Pro Gly Asp Glu Glu Glu Gly Leu
295 305                 310                 315                 320
297 tgt cag tcc tct gag gag cag gct cga gag cct ggg cac ccg cac ctg  1008
298 Cys Gln Ser Ser Glu Glu Gln Ala Arg Glu Pro Gly His Pro His Leu
299                 325                 330                 335
301 cca cgg ccg ccc gca tgc ctg ctg ctg aac acc atc aac gag cag gac  1056
302 Pro Arg Pro Pro Ala Cys Leu Leu Leu Asn Thr Ile Asn Glu Gln Asp
303             340                 345                 350
305 tct ccc aac tcc cag agc agc agc tcc ccc agc tagagcaggt cctgccagca 1109
306 Ser Pro Asn Ser Gln Ser Ser Ser Ser Pro Ser
307         355                 360
309 cccagcaact tggcaaagca accagggtag g                              1140
312 <210> SEQ ID NO: 4
313 <211> LENGTH: 363
314 <212> TYPE: PRT
315 <213> ORGANISM: Homo sapiens
317 <400> SEQUENCE: 4
318 Met Glu Arg Arg Arg Leu Leu Gly Gly Met Ala Leu Leu Leu Leu Gln
319   1               5                  10                  15
321 Ala Leu Pro Ser Pro Leu Ser Ala Arg Ala Glu Pro Pro Gln Asp Lys
322              20                  25                  30
324 Glu Ala Cys Val Gly Thr Asn Asn Gln Ser Tyr Ile Cys Asp Thr Gly
325          35                  40                  45
327 His Cys Cys Gly Gln Ser Gln Cys Cys Asn Tyr Tyr Tyr Glu Leu Trp
328      50                  55                  60
330 Trp Phe Trp Leu Val Trp Thr Ile Ile Ile Ile Leu Ser Cys Cys Cys
331  65                  70                  75                  80
333 Val Cys His His Arg Arg Ala Lys His Arg Leu Gln Ala Gln Gln Arg
334                  85                  90                  95
336 Gln His Glu Ile Asn Leu Ile Ala Tyr Arg Glu Ala His Asn Tyr Ser
337             100                 105                 110
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/08/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 10:52:15

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08082005\J729895A.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:17; Xaa Pos. 4

VERIFICATION SUMMARY DATE: 08/08/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 10:52:15

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08082005\J729895A.raw**

L:624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0

**Raw Sequence Listing before editing,
for reference only**

IFWO

RAW SEQUENCE LISTING DATE: 08/03/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 14:35:17

Input Set : **A:\N12-038US Seg Listing.txt**
Output Set: **N:\CRF4\08032005\J729895A.raw**

```
  3 <110> APPLICANT: UNIVERSITY OF NEW MEXICO
  5 <120> TITLE OF INVENTION: OUTCOME PREDICTION AND RISK CLASSIFICATION IN CHILDHOOD
  6       LEUKEMIA
  8 <130> FILE REFERENCE: N12-038US/310.00050101
 10 <140> CURRENT APPLICATION NUMBER: 10/729,895A
 11 <141> CURRENT FILING DATE: 2003-12-05
 13 <150> PRIOR APPLICATION NUMBER: 60/510,904
 14 <151> PRIOR FILING DATE: 2003-10-14
 16 <150> PRIOR APPLICATION NUMBER: 60/510,968
 17 <151> PRIOR FILING DATE: 2003-10-14
 19 <150> PRIOR APPLICATION NUMBER: 60/432,064
 20 <151> PRIOR FILING DATE: 2002-12-06
 22 <150> PRIOR APPLICATION NUMBER: 60/432,077
 23 <151> PRIOR FILING DATE: 2002-12-06
 25 <150> PRIOR APPLICATION NUMBER: 60/432,078
 26 <151> PRIOR FILING DATE: 2002-12-06
 28 <160> NUMBER OF SEQ ID NOS: 18
 30 <170> SOFTWARE: PatentIn Ver. 3.2
```

Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

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628 <210> SEQ ID NO: 18
629 <211> LENGTH: 24
630 <212> TYPE: DNA
631 <213> ORGANISM: Artificial Sequence
633 <220> FEATURE:
634 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
635       primer
637 <400> SEQUENCE: 18
638 ttttttttttt ttttttttttt tttt                                    24
```

E--> 641 12
E--> 643 12/12

VERIFICATION SUMMARY DATE: 08/03/2005
PATENT APPLICATION: **US/10/729,895A** TIME: 14:35:18

Input Set : **A:\N12-038US Seg Listing.txt**
Output Set: **N:\CRF4\08032005\J729895A.raw**

L:624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:641 M:254 E: No. of Bases conflict, this line has no nucleotides.
M:254 Repeated in SeqNo=18
L:643 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3
L:643 M:252 E: No. of Seq. differs, <211> LENGTH:Input:24 Found:25 SEQ:18